WHAT IS CLAIMED IS:

1. A chimeric peptide represented by formula (I) or formula (II),

(I) $N-(S)_m-(T_h)_n$

(II) $(T_h)_n-(S)_m-C$

or chimeric peptides which are mixtures of formula (I) peptides, mixtures of formula (II) peptides, or mixtures of formula (I) and formula (II) peptides, wherein:

N is the first 2, 3, 4, or 5 amino acid residues from the free N-terminus of a naturally-occurring internal peptide cleavage product which, when naturally-occurring in a mammal, is derived from a precursor protein or a mature protein;

C is the last 2, 3, 4, or 5 amino acid residues from the free C-terminus of said naturally-occurring internal peptide cleavage product;

T_h is a T helper cell epitope;

S is a spacer amino acid residue;

m is 0, 1, 2, 3, 4, or 5; and

n is 1, 2, 3, or 4.

2. The chimeric peptide or peptides according to claim 1, wherein said internal peptide cleavage product is an amyloid β peptide, which, when naturally-occurring, is derived from cleavage of β amyloid precursor protein (βAPP).

3. The chimeric peptide or peptides according to claim 2, wherein said internal peptide cleavage product has an amino

acid sequence selected from the group consisting of SEQ ID NOs:2, 3, 4, 5, 6, 7, and mixtures thereof.

4. The chimeric peptide or peptides according to claim 1, wherein N is the first 2 or 3 amino acid residues from the free N-terminus of said internal peptide cleavage product.

5. The chimeric peptide or peptides according to claim 1, wherein C is the last 2 or 3 amino acid residues from the free C-terminus of said internal peptide cleavage product.

6. The chimeric peptide or peptides according to claim 1, wherein T_h is a promiscuous T helper cell epitope.

7. The chimeric peptide or peptides according to claim 6, wherein said promiscuous T helper cell epitope is derived from tetanus toxin, pertussis toxin, diphtheria toxin, measles virus F protein, hepatitis B virus surface antigen, *Chlamydia trachomitis* major outer membrane protein, *Plasmodium falciparum* circumsporozoite, *Schistosoma mansoni* triose phosphate isomerase, or *Escherichia coli* TraT.

8. The chimeric peptide or peptides according to claim 7, wherein said promiscuous T helper cell epitope has an amino acid sequence selected from the group consisting of SEQ ID NOs:8 to 27.

9. The chimeric peptide or peptides according to claim 1, wherein S is glycine.

10. An immunizing composition, comprising an immunizing effective amount of the chimeric peptide or peptides

according to claim 1 and a pharmaceutically acceptable carrier, excipient, diluent, or auxiliary agent.

11. The immunizing composition according to claim 10, wherein said pharmaceutically acceptable auxiliary agent is an adjuvant.

12. The immunizing composition according to claim 11, wherein said adjuvant is alum.

13. A method for immunization against the free N-terminus or free C-terminus of an internal self peptide cleavage product derived from a precursor protein or a mature protein, comprising administering to a mammal the immunizing composition according to claim 10, for which the internal peptide cleavage product is a self molecule of the mammal.

14. The method according to claim 13, wherein the mammal is a human.

15. The method according to claim 14, wherein the internal self peptide cleavage product is an amyloid β peptide, which when naturally-occurring, is derived from cleavage of β amyloid precursor protein, whereby said method raises antibodies specific to the free N-terminus and/or free C-terminus of the amyloid β peptide.

16. A molecule comprising the antigen-binding portion of an antibody specific for the chimeric peptide according to claim 1.

17. The molecule according to claim 16, wherein said antibody is a monoclonal antibody.

18. A method for passive immunization, comprising administering to a mammal the molecule of claim 16.

19. The method according to claim 18, wherein the mammal is human.

20. The method according to claim 19, wherein said chimeric peptide against which the antibody is raised is one where the internal peptide cleavage product is an amyloid β peptide, which, when naturally-occurring, is derived from cleavage of β amyloid precursor protein (βAPP).